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ENVIRONMENTAL ENGINEERING SOLUTIONS, P.C.

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October 30, 2015

Mr. Sam Lieblich, P.E.
Regional Air Pollution Control Engineer
NYSDEC - Region 2
47-40 21st Street, One Hunters Point Plaza
Long Island City, NY 11101-5407

Re:
- **NYC-DOC – Riker's Island, E Elmhurst, NY; DEC ID 2-6007-00259/00033**
- TV Ren 2 - Annual Compliance Report (10/01/14 – 09/30/15)
- TV Ren 2- Semi – Annual Compliance Report (04/01/15 – 09/30/15)
- Annual COMS Off Stack Alignment Report for 2015

Dear Mr. Lieblich:

This is in reference to the compliance reports required as per Title V Ren 2 issued to the above referenced facility.

Based on the data provided by Riker's Island facility, we prepared the compliance documentation.

Should you have any questions on this submittal, please feel free to call us at (914) 788 4165. Thank you.

Very truly yours,

ENVIRONMENTAL ENGINEERING SOLUTIONS, P.C.

N Kumar

Neeraj Kumar, Environmental Engineer

CC.
1. The NYSDEC - Bureau of Quality Assurance, NYSDEC, Albany
2. The Chief - The USEPA Region 2, Air Compliance Branch
3. Mr. Curtis Pierre, NYCDOC – Riker's Island

Encl: 2 Reports

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TITLE V

ANNUAL COMPLIANCE REPORT

SUBMITTED TO NYSDEC REGION 2
(REPORTING PERIOD: October 01, 2014 – September 30, 2015)

FOR

NYCDOC – Riker's Island

17-25 Hazen Street
East Elmhurst, NY 11370

DEC ID: 2-6007-00259/00033
(Ren 2)

October 30, 2015

Prepared by

EES

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CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Report Type: ANNUAL COMPLIANCE REPORT Reporting Period: 10/01/2014 to: 09/30/2015

DEC ID: 2-6007-00259/00033 Ren 2

Facility Name: NYC-DOC-RIKER'S ISLAND

Address: 17-25 HAZEN STREET, EAST ELMHURST, NY 11370

FACILITY CONTACT:

Name: Mr. Curtis Pierre

Title: Senior Stationary Engineer

Telephone: 718-546-1488

RESPONSIBLE OFFICIAL:

Name: Mr. Vincent Perillo

Title: Assistant Deputy Warden, Support Services Division

Address: 13-11 Hazen Street, East Elmhurst, NY 11370

Telephone: 718-546-1429

The Responsible Official must sign this statement after the applicable report form is completed.

I certify, under penalty of law, that based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Signature of Responsible Official:

Vint Perille

Date: 10/23/15

ANNUAL COMPLIANCE REPORT

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
1	6 NYCRR 200.6	Facility	Acceptable ambient air quality	Continuous	The facility is in compliance with this permit condition	N
2	6 NYCRR 201-6.5(a)(7)	Facility	Fees	Continuous	The facility pays fees as per the schedule	N
3	6 NYCRR 201-6.5(c)	Facility	Recordkeeping and reporting of compliance monitoring	Continuous	Facility provides necessary details in the compliance reports and recordkeeping	N
4	6 NYCRR 201-6.5(c) (2)	Facility	Monitoring, Related recordkeeping & Reporting Requirements	Continuous	Facility maintains records for 5 years at site, performs necessary reporting & recordkeeping	N
5	6 NYCRR 201-6.5(c)(3)(ii)	Facility	Compliance certification	Continuous	The facility submits semi-annual compliance reports on time	N
6	6 NYCRR 201-6.5(e)	Facility	Compliance certification	Continuous	Facility submits compliance reports within 30 days of the reporting period	N
7	6 NYCRR 202-2.1	Facility	Compliance Certification	Continuous	AES was submitted before 4/15	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
8	6 NYCRR 202-2.5	Facility	Recordkeeping requirements	Continuous	Facility submitted copy of AES to the department, and calculations	N
9	6 NYCRR 215.2	Facility	Open Fires - Prohibitions	Continuous	Facility is in compliance with this condition	N
10	6 NYCRR 200.7	Facility	Maintenance of equipment	Continuous	Maintenance of equipment are performed as per the facility policies	N
11	6 NYCRR 201-1.7	Facility	Recycling and salvage	Continuous	Facility performs the recycling as per facility policies	N
12	6 NYCRR 201-1.8	Facility	Prohibition of Reintroduction of Collected Contaminants to the air	Continuous	Facility is in compliance with this permit condition	N
13	6 NYCRR 201-3.2(a)	Facility	Exempt sources – proof of eligibility	Continuous	Exempt sources are operated as per the permit condition	N
14	6 NYCRR 201-3.3(a)	Facility	Trivial sources – proof of eligibility	Continuous	Facility abides by this condition based on a practical standpoint	N
15	6 NYCRR 201-6.5(a)(4)	Facility	Standard requirement – provide information	Continuous	Facility will provide information as requested by the department	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
16	6 NYCRR 201-6.5(a)(8)	Facility	General Condition - Right to Inspect	Continuous	Facility allows departmental inspection	N
17	6 NYCRR 201-6.5(d)(5)	Facility	Standard Requirements - Progress Reports	Continuous	Quarterly, semi-annual and annual compliance reports are submitted on time	N
18	6 NYCRR 201-6.5(f)(6)	Facility	Off permit changes	Continuous	No off permit changes were made	N
19	6 NYCRR 202-1.1	Facility	Required emission tests	Continuous	Stack testing of boilers and PLM generators were performed.	N
20	40 CFR Part 68	Facility	Accidental release provisions	Continuous	All chemicals are below the threshold of a requirement of a risk management plan	N
21	40CFR 82, Subpart F	Facility	Recycling and Emissions Reduction	Continuous	Facility does not operate refrigerant recovery units, an external contractor performs the recovery	N
22	6 NYCRR Subpart 201-6	Facility	Emission Unit Definition	Continuous	Facility identifies the units as per the definition	N
23	6 NYCRR 202-1.2	Facility	Notification	Continuous	Facility makes required notifications	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
24	6 NYCRR 211.1	Facility	Air pollution prohibited	Continuous	Facility is in compliance with the requirements	N
25	6 NYCRR 225-1.7(e)	Facility	Compliance Certification	Continuous	Facility does not purchase fuel oil with sulfur content in excess of 0.2 wt. %. This is verified by the delivery tickets issued by the supplier	N
26	6 NYCRR 225.1 (a) (3)	Facility	Compliance Certification	Continuous	Facility does not purchase fuel oil with sulfur content in excess of 0.2 wt. %. This is verified by the delivery tickets issued by the supplier	N
27	6 NYCRR 225.7(a)	Facility	Compliance Certification	Continuous	Tickets are obtained per delivery as provided by the supplier that has sulfur content information	N
28	40CFR 60.7(a), NSPS Subpart A	Facility	Date of construction notification - If a COM is not used	Continuous	Facility will notify, if a construction is scheduled	N
29	40CFR 60.7(a), NSPS Subpart A	Facility	Date of construction notification - If a COM is not used	Continuous	Facility will notify, if a construction is scheduled	N
30	40CFR 60.7(c), NSPS Subpart A	Facility	Compliance Certification for COMS operation	Continuous	The COMS is operation continuously. Excess emissions are reported. Quarterly audits are performed	N
31	40CFR 60.8(a), NSPS Subpart A	Facility	Performance testing timeline.	Continuous	PM2.5 and Nox testing has been completed as of May 2015. However, the testing date was after 180 days of the initial startup of the turbine	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
32	40CFR 60.8(d), NSPS Subpart A:	Facility	Prior Notice	Continuous	30 days prior notice will be provided	N
33	40CFR 60.4211(a), NSPS Subpart IIII	Facility	Compliance Certification	Continuous	Compliance certification activity is performed at least semi-annually for this facility	N
34	6 NYCRR Subpart 201-6	Facility	Emission point definition by emission unit	Continuous	Units and emission points are as per definition.	N
35	6 NYCRR Subpart 201-6	Facility	Process definition by emission unit	Continuous	Facility identifies the process definitions as per the permit definition. Currently, only 15 units are permitted to participate in the PLM program as per the Ren 2 NOx RACT variance	N
36	6 NYCRR Subpart 201-7	Facility	Emission Unit Permissible Emissions	Continuous	The emission rates are within the limits specified under this condition	N
37	6 NYCRR Subpart 201-7	Facility	Process Permissible Emissions	Continuous	The emission rates are within the limits specified under this condition	N
38	6 NYCRR 227-2.4 (c) (1) (i)	Facility	Compliance Certification Intermittent emission testing for NOx on boilers	Continuous	Testing will be performed within the permit term	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
39	6 NYCRR 231-10.5	U-00001	Compliance Certification	Continuous	Total NOx/yr emissions for this unit is over 8.0 tpy. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y
40	6 NYCRR 231-10.5	U-00001	Compliance Certification	Continuous	PM emission is under 1.1 tpy limit. Cogen plant has been installed and is in testing phase	N
41	40CFR 60.40c, NSPS Subpart Dc	U-00001	Applicability of this Subpart to this emission source	Continuous	Facility is in compliance with the condition requirements. Reports are submitted on time	N
42	40CFR 60.46c(d)(2), NSPS Subpart Dc	U-00001	Compliance Certification	Continuous	Facility does not purchase fuel oil with sulfur content in excess of 0.2 wt. %. This is verified by the delivery tickets provided by the supplier	N
43	40CFR 60.48c, NSPS Subpart Dc	U-00001	Recordkeeping and reporting	Continuous	Facility record keeps and reports as required	N
44	6 NYCRR 227-1.3(a)	U-00001, EP U0001	Compliance Certification	Continuous	A COMS is operational for this unit. Opacity is below 20%	N
45	6 NYCRR 227-1.4(b)	U-00001, EP U0001	Compliance Certification	Continuous	A COMS is operational for this unit. Opacity is below 20%	N
46	40CFR 60.13, NSPS Subpart A	U-00001, EP U0001	Monitoring requirements	Continuous	COMS is audited every quarterly, reports are submitted	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
47	40CFR 60.45c, NSPS Subpart Dc	U-00001, EP U0001	Compliance methods for particulate matter	Continuous	Stack testing will performed as per the approved protocol	N
48	6 NYCRR 227.2 (b) (1)	U-00001, EP U0001, P 002	Compliance Certification	Continuous	PM testing will be performed within the permit term based on approved protocol	N
49	6 NYCRR 231-10.5	U-00002	Compliance Certification	Continuous	NOx exceeded 2.0 tpy limit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y
50	6 NYCRR 231-10.5	U-00002	Compliance Certification	Continuous	PM emissions are under 0.28 tpy based on the formula stated in the condition	N
51	40CFR 60.40c, NSPS Subpart Dc	U-00002	Applicability of this Subpart to this emission source	Continuous	Facility submits required reports are other general requirements are performed as well such as recordkeeping	N
52	40CFR 60.46c(d)(2), NSPS Subpart Dc	U-00002	Compliance Certification	Continuous	Facility does not purchase fuel oil with sulfur content in excess of 0.2 wt. %. This is verified by the delivery tickets provided by the supplier	N
53	40CFR 60.48c, NSPS Subpart Dc	U-00002	Recordkeeping and reporting	Continuous	Facility is in compliance with this permit condition	N
54	6 NYCRR 227-1.3 (a)	U-00002, EP U0002	Compliance Certification	Continuous	Facility performs visual method 9 process for smoke opacity determination whenever operated on oil. Opacity is below 20%	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
55	40CFR 60.45c, NSPS Subpart Dc	U-00002, EP U0002	Compliance methods for particulate matter	Continuous	Testing will be performed based on approved protocol	N
56	6 NYCRR 227.2 (b) (1)	U-00002, EP U0002, P 004	Compliance Certification	Continuous	Testing will be performed within the permit term	N
57	6 NYCRR 231-10.5	U-00003	Compliance Certification	Continuous	PM emissions for this unit is in excess of 0.14 tpy limit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y
58	6 NYCRR 231-10.5	U-00003	Compliance Certification	Continuous	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y
59	40CFR 60.40c, NSPS Subpart Dc	U-00003	Applicability of this Subpart to this emission source	Continuous	Facility is in compliance with this condition	N
60	40CFR 60.46c(d)(2), NSPS Subpart Dc	U-00003	Compliance Certification	Continuous	Facility does not purchase fuel oil with sulfur content in excess of 0.2 wt. %. This is verified by the delivery tickets provided by the supplier	N
61	40CFR 60.48c, NSPS Subpart Dc	U-00003	Recordkeeping and reporting	Continuous	Facility is in compliance with this condition	N
62	6 NYCRR 227-1.3 (a)	U-00003, EP U0003	Compliance Certification	Continuous	Facility performs visual method 9 process for smoke opacity determination whenever operated on oil. Opacity is below 20%	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
63	40CFR 60.45c, NSPS Subpart Dc	U-00003, EP U0003	Compliance methods for particulate matter	Continuous	Emission testing will be performed for this unit within in the permit term based on an approved protocol	N
64	6 NYCRR 227.2 (b) (1)	U-00003, EP U0003, P 006	Compliance Certification	Continuous	Emission testing will be performed for this unit within in the permit term based on an approved protocol	N
65	6 NYCRR Subpart 231-2	U-00009	Compliance Certification	Continuous	VOC emissions is under 2.5 tpy for this unit	N
66	6 NYCRR 228-1.5	U-00009, P 00P, ES 0000P	Compliance Certification	Continuous	VOC content of the materials used for coating is within the permitted limits	N
67	6 NYCRR 228-1.4	U-00009, EP 00009	Compliance Certification	Continuous	Opacity from this process is well under 20%. Filters are used in exhaust	N
68	6 NYCRR 228-1.8	U-00009, EP 00009, P 00P, ES 0000P	Compliance Certification	Continuous	Lbs/gal content is under the specified limits	N
69	6 NYCRR 228-1.8	U-00009, EP 00009, P 00P, ES 0000P	Compliance Certification	Continuous	The lbs/gal content is under the specified limits	N
70	6 NYCRR 227-1.3 (a)	U-00009, EP 00009, P 00P, ES 0000P	Compliance Certification	Continuous	Visual smoke readings are logged whenever the engines are operated. Opacity is below 20%	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
71	6 NYCRR Subpart 201-7	U-00010, P GEN	Capping Monitoring Condition	Continuous	NOx emissions are well under 22.5 tpy	N
72	6 NYCRR 227.2 (b) (1)	U-00010, EP 00010, P GEN	Compliance Certification	Continuous	PM emissions testing will be performed within the permit term	N
73	6 NYCRR Subpart 201-6	U-00011	Compliance Certification	Continuous	NOx testing will be performed within this permit term	N
74	6 NYCRR Subpart 201-6	U-00011	Compliance Certification	Continuous	PM10 emissions testing will be performed within the permit term	N
75	6 NYCRR Subpart 201-6	U-00011	Compliance Certification	Continuous	Testing for PM2.5 was completed in May 2015. the $PM_{2.5}$ (condensibles) were tested and found to be below 0.0014 lbs/MMBtu which also satisfies with the Net Emissions Increment threshold of 10 tons per year	N
76	6 NYCRR Subpart 201-7	U-00011	Capping Monitoring Condition	Continuous	The NOx emissions is under 42.0 tpy. The emissions test was completed in April 2015	N
77	6 NYCRR Subpart 201-7	U-00011	Capping Monitoring Condition	Continuous	The PM-10 emissions are under 15.77 tpy for this unit. Emissions testing was completed in April 2015 during which the $PM_{2.5}$ (condensibles) were tested and found to be below 0.0014 lbs/MMBtu which also satisfies with the Net Emissions Increment threshold of 10 tons per year	N
78		U-00011	Compliance Certification	Continuous	Opacity emission from these units will be under	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
	6 NYCRR 227-1.3 (a)				20%. The cogen plant is operational	
79	6 NYCRR 231-6.2	U-00011	Compliance Certification	Continuous	The construction was commenced after 7/18/12	N
80	40CFR 60.4340(a), NSPS Subpart KKKK	U-00011	Compliance Certification	Continuous	Testing was completed in April 2015	N
81	40CFR 60.4365(a), NSPS Subpart KKKK	U-00011	Compliance Certification	Continuous	Testing was completed in April 2015	N
82	40CFR 60.4400(b), NSPS Subpart KKKK	U-00011	NOx performance testing methodology	Continuous	The plant has been installed. CEMS may be installed	N
83	40CFR 60.4375(b), NSPS Subpart KKKK	U-00011, P 007	Compliance Certification	Continuous	Test reports will be submitted within the 60-days limit	N
84	40CFR 60.4400(a), NSPS Subpart KKKK	U-00011, P 007	Test methods for NOx	Continuous	Subsequent tests will be conducted within the 14 months limit	N
85	40CFR 60.4415, NSPS Subpart KKKK	U-00011, P 007	Compliance Certification	Continuous	Initial test was completed in April 2015	N
86	40CFR 60.4320(a), NSPS Subpart KKKK	U-00011, P 007, ES 00029	Compliance Certification	Continuous	Turbine NOx emissions is limited at 25 ppm. Test was completed in May 2015 and the limit is well under the 25 ppm limit, under 13 ppm.	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
87	40CFR 60.4320(a), NSPS Subpart KKKK	U-00011, P 007, ES 00030	Compliance Certification	Continuous	Turbine NOx emissions is limited at 25 ppm. Test was completed in April 2015. NOx emissions were found to be under 13 ppm for both CHP systems	N
88	40CFR 60.4205(b), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	The engine is certified by the manufacturer	N
89	40CFR 60.4207(b), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	The diesel used has aromatic content less than 35%. The analysis is provided by the supplier (of fuel)	N
90	40CFR 60.4207(b), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	The minimum cetane index ratio of the diesel used is 40. The index information is provided by the supplier	N
91	40CFR 60.4207(b), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	The sulfur content of the diesel fuel used is either equal to or below 15ppm. Fuel oil delivery tickets indicate the sulfur content, as provided by the supplier	N
92	40CFR 60.4209(a), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	A non-resettable hour meter is on the generator/engine	N
93	40CFR 60.4211(e), NSPS Subpart IIII	U-00011, P 008, ES 00033	Compliance Certification	Continuous	The maintenance checks and testing hours are well under 100 hrs per year	N
94	ECL 19-0301	Facility	Contaminant List	Continuous	NOx, PM, SO_2, and VOC – in compliance	N
	6 NYCRR 201-1.4	Facility	Unavoidable noncompliance and	Continuous	Facility is in compliance with this condition	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
95			violations			
96	6 NYCRR 201-1.4	Facility	Unavoidable noncompliance and violations	Continuous	Facility is in compliance with this condition	N
97	6 NYCRR 211.2	Facility	Visible Emissions Limited	Continuous	Opacity from any source operated at this facility is well under 20%	N
98	6 NYCRR 227-2.4 (f) (3)	U-00010 ES0021 ES0023 ES0026 ES0028	Compliance Demonstration	Continuous	These engines are not participating in demand response program. They are purely used for emergency purposes only. And, therefore, the emissions testing requirement is not applicable	N
99	6 NYCRR 227-2.5 (b)	U-00001 U-00002 U-00003	Compliance Demonstration	Continuous	The facility follows the original NOx RACT plan submitted by Keyspan for the boilers. The plant is operated according to the plan and are in compliance with the ozone season restrictions	N
100	6 NYCRR 227-2.5 (c)	U-00001 U-00002 U-00003	Compliance Demonstration	Continuous	Tune ups are performed on an annual basis and records are maintained on site	N
101	6 NYCRR 227-2.5 (c)	U-00001 U-00002 U-00003 P001 P002 P003 P004 P005 P006	Compliance Demonstration NOx RACT emissions testing for the boilers	Continuous	NOx emissions testing on these boilers will be performed within the permit term to show the 0.12 lbs/MMBtu limit	N
102	6 NYCRR 227-2.5 (c)	U-00010, EP 00010,	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted	Y

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
		P GEN, ES 00010			with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	
103	6 NYCRR 227-2.5 (c)	U-00010, EP 00011, P GEN, ES 00011	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
104	6 NYCRR 227-2.5 (c)	U-00010, EP 00012, P GEN, ES 00012	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
105	6 NYCRR 227-2.5 (c)	U-00010, EP 00013, P GEN, ES 00013	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
106	6 NYCRR 227-2.5 (c)	U-00010, EP 00014, P GEN, ES 00014	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
107	6 NYCRR 227-2.5 (c)	U-00010, EP 00015, P GEN, ES 00015	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
108	6 NYCRR 227-2.5 (c)	U-00010, EP 00016, P GEN, ES 00016	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
109	6 NYCRR 227-2.5 (c)	U-00010, EP 00017, P GEN, ES 00017	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Continuous (or) Intermittent	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N
110	6 NYCRR 227-2.5 (c)	U-00010, EP 00018, P GEN, ES 00018	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
111	6 NYCRR 227-2.5 (c)	U-00010, EP 00019, P GEN, ES 00019	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
112	6 NYCRR 227-2.5 (c)	U-00010, EP 00020, P GEN, ES 00020	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
113	6 NYCRR 227-2.5 (c)	U-00010, EP 00022, P GEN, ES 00022	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
114	6 NYCRR 227-2.5 (c)	U-00010, EP 00024, P GEN, ES 00024	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
115	6 NYCRR 227-2.5 (c)	U-00010, EP 00025, P GEN, ES 00025	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
116	6 NYCRR 227-2.5 (c)	U-00010, EP 00027, P GEN, ES 00027	Compliance Demonstration	Continuous	NOx testing will be performed within the permit term. However, the engines are NOT retrofitted with CO (carbon monoxide) reduction systems as part of Subpart ZZZZ requirements	Y
117	6 NYCRR 227-2.4 (f) (6)	U-00011, P 008, ES 00033	Compliance Demonstration	Continuous	The engine is not operated in excess of 500 hrs/year	N

SUMMARY OF DEVIATIONS FROM PERMIT REQUIREMENTS

Condition Number(s)	Applicable Requirement	Permit Level	Description of Deviation	Probable Cause of Deviation	Corrective/Preventative Action Taken as a Result of the Deviation	Date of Written Notification
39	6 NYCRR 231-10.5	U-00001	Compliance Certification	Total NOx/yr emissions for this unit is over 8.0 tpy. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
49	6 NYCRR 231-10.5	U-00002	Compliance Certification	NOx exceeded 2.0 tpy limit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
57	6 NYCRR 231-10.5	U-00003	Compliance Certification	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
58	6 NYCRR 231-10.5	U-00003	Compliance Certification	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
102 through 116	40 CFR 63, Subpart ZZZZ	U-00010	15 Diesel generators were participated in the non-emergency program without having CO catalyst per ZZZZ requirements	None	Facility to work on either removing from program or install CO catalyst with CPMS systems and other related Subpart ZZZZ requirements	This REPORT

TITLE V

SEMI-ANNUAL COMPLIANCE REPORT

SUBMITTED TO NYSDEC REGION 2
(REPORTING PERIOD: April 01, 2014 – September 30, 2015)

FOR

NYCDOC – Riker's Island

17-25 Hazen Street
East Elmhurst, NY 11370

DEC ID: 2-6007-00259/00033
(Ren 2)

October 30, 2015

Prepared by

EES

ENVIRONMENTAL ENGINEERING SOLUTIONS, P.C.
CONSULTING ENGINEERS
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CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Report Type: SEMI-ANNUAL COMPLIANCE REPORT Reporting Period: 04/01/2015 to: 09/30/2015

DEC ID: 2-6007-00259/00033 Ren 2

Facility Name: NYC-DOC-RIKER'S ISLAND

Address: 17-25 HAZEN STREET, EAST ELMHURST, NY 11370

FACILITY CONTACT:

Name: Mr. Curtis Pierre

Title: Senior Stationary Engineer

Telephone: 718-546-1488

RESPONSIBLE OFFICIAL:

Name: Mr. Vincent Perillo

Title: Assistant Deputy Warden, Support Services Division

Address: 13-11 Hazen Street, East Elmhurst, NY 11370

Telephone: 718-546-1429

The Responsible Official must sign this statement after the applicable report form is completed.

I certify, under penalty of law, that based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Signature of Responsible Official:

Vnt Pell Date: 10/23/15

SEMI - ANNUAL MONITORING REPORT

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
5	6 NYCRR 201-6.5(c)(3)(ii)	Facility	The facility should submit semi-annual compliance reports	The facility submits semi-annual compliance reports on time	N	N
25	6NYCRR 225-1.7(e)	Facility	Distillate oil sulfur content ≤ 0.2 wt. %	Distillate fuel oil used at the facility has sulfur content ≤ 0.2 wt. %	N	N
26	6NYCRR 225.1(a)(3)	Facility	Distillate fuel oil sulfur content ≤ 0.2 wt% & certificates must be maintained per delivery	Distillate fuel oil sulfur content ≤ 0.2 wt. % & sulfur certificates are maintained per delivery	N	N
27	6 NYCRR 225.7(a)	Facility	Fuel oil delivery certificates must be retained per delivery	Facility retains fuel oil delivery certificates per delivery	N	N
98	6NYCRR 227-2.4(f)(3)	U-00010 ES00021 ES00023 ES00026 ES00028	Intermittent emissions testing. These 4 engines to participate in CDRP program only after demonstrating the 2.3 gm/bhp-hr. NOx criteria or seeking variance	These engines are NOT participated in the program	N	N
99	6 NYCRR 227-2.5(b)	Facility	Follow KEYSPAN plan daily during 5/1 – 9/30 & monthly during rest of the year	Facility follows the Keyspan plan and maintains records. Reports are submitted semiannually.	N	N
30	40 CFR 60.7(c), NSPS Sub A	Facility	COMS excess emissions must be reported within 48 hours	Facility will report of excess emissions, none in this reporting period	N	N
33	40 CFR 60.4211(a),	U-00011	Facility must maintain the engines according	Facility is in compliance with this condition.	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
	NSPS Subpart IIII	P008 ES 00033	to manufacturer's written procedure. Only those settings may be changed that are permitted by the manufacturer. In addition, the owner must also meet the requirements of 40 CFR Parts 89, 94 and/or 1068	Engine testing hours are limited to under 100 hrs per year.		
35	40 CFR 60.43c(c) Sub Dc	Facility	Boiler operations: opacity < 20 %	Opacity is below 20%	N	N
38	6NYCRR 227-2.4(c)(1)(i)	U-00001 U-00002 U-00003	NOx emissions testing of eight boilers on gas and distillate fuel oil must be performed once per term. The NOx limit is 0.12 lbs/MMBtu	Facility will perform the test for this term shortly. A protocol will be submitted prior to testing	N	N
93	40 CFR 60.4211(e), NSPS Subpart IIII	U-00011 P008 ES 00033	Facility must maintain the engines according to manufacturer's written procedure. Only those settings may be changed that are permitted by the manufacturer. In addition, the owner must also meet the requirements of 40 CFR Parts 89, 94 and/or 1068	Facility is in compliance with this condition. Engine testing hours are limited to under 100 hrs per year.	N	N
39	6 NYCRR 231-10.5	U-00001	This condition will be effective once the cogen units are operated – U00011. 12-month NOx rolling tally will be limited to 8 tpy based on 2007 stack test factors for the four boilers #6,#7, #8 and #9	Total NOx/yr emissions for this unit is over 8.0 tpy. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y	This REPORT

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
40	6 NYCRR 231-10.5	U-00001	This condition will be effective once the cogen units are operated – U00011. 12-month PM-10 rolling tally will be limited to 1.1 tpy based on AP-42 emission factor four boilers #6,#7, #8 and #9	Cogen units are operational. The PM10 limit is under the allowed limits	N	N
42	40 CFR 60.46c(d)(2), NSPS Sub Dc	U-00001	Fuel oil must be sampled per delivery as per Method 19 and 30 day rolling average	Facility maintains sulfur certificates per delivery & distillate fuel oil sulfur content ≤ 0.2 wt. %	N	N
44	6 NYCRR 227-1.3(a)	U-00001	Daily visual opacity to be observed and logged or whenever operational. Method 9 is not mandatory	Facility performs visual opacity logging procedures. Opacity was below 20%.	N	N
48	6 NYCRR 227.2(b)(1)	U-00001 EP U0001 P 002	Particulate stack testing once during the term of the permit, limit: 0.1 lb/mmBtu	Stack testing for this permit term will be performed	N	N
49	6 NYCRR 231-10.5	U-00002	This condition will be effective once the cogen units are operated – U00011. 12-month NOx rolling tally will be limited to 2 tpy based on 2007 stack test factors	NOx exceeded 2.0 tpy limit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y	This REPORT
50	6 NYCRR 231-10.5	U-00002	This condition will be effective once the cogen units are operated – U00011. 12-month NOx rolling tally will be limited to 0.28 tpy	Cogen units are operational. The PM10 emissions from the four boilers are under the allowed limit	N	N
52	40 CFR 60.46c(d)(2) NSPS Sub Dc	U-00002	Fuel oil sulfur content must be tested by Method 19, limit: 0.2 wt %, 30 day rolling average	Facility retains sulfur certificate from the supplier	N	N
54	6 NYCRR 227-	U-00002	Daily visual opacity to be observed and	Facility performs visual opacity logging	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
	1.3(a)		logged or whenever operational. Method 9 is not mandatory	procedures. Opacity was below 20%.		
56	6 NYCRR 227.2(b)(1)	U-00002 EP U0002 P 004	Particulate stack testing once during the term of the permit, limit: 0.1 lb/MMBtu	Facility will perform the required stack test as per the approved protocol, test results were submitted, emission rate was below maximum allowed limit	N	N
57	6 NYCRR 231-10.5	U-00003	This condition will be effective once the cogen units are operated – U00011. 12-month PM10 rolling tally will be limited to 0.14 tpy based on AP-42 factors for boilers # 4 and #5	PM emissions is over 0.14 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y	This REPORT
58	6 NYCRR 231-10.5	U-00003	This condition will be effective once the cogen units are operated – U00011. 12-month NOx rolling tally will be limited to 1.0 tpy based on 2007 stack test factors for boiler #4 and #5	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Y	This REPORT
60	40 CFR 60.7c(d)(2), NSPS Sub Dc	U-00003	Fuel oil sulfur content must be tested by Method 19, limit: 0.2 wt %, 30 day rolling average	Facility retains sulfur certificate from the supplier	N	N
62	6 NYCRR 227-1.3(a)	U-00003	Daily visual opacity to be observed and logged or whenever operational. Method 9 is not mandatory	Facility performs visual opacity logging procedures. Opacity was below 20%.	N	N
64	6 NYCRR 227.2(b)(1)	U-00003 EP U0003 P 006	Particulate stack testing once during the term of the permit, limit: 0.1 lb/MMBtu	Facility will perform the stack testing as per DEC's approved protocol, the emission rates were below maximum allowed limits	N	N
65	6NYCRR 231-2	U-00009	Spray paint booth VOCs limited to 2.5 TPY –	Facility's VOC emissions are below the	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
			annual maximum rolled monthly	allowed emission limit		
66	6NYCRR 228-1.5	U-00009 ES 0000P P 00P	Paint consumption records must be maintained, allow inspection, submit report when requested	Facility maintains records, will allow inspection and submit reports when requested	N	N
67	6 NYCRR 228-1.4	U-00009 ES 0000P P 00P	Visual opacity not to exceed 20%	Opacity from paint operations is below 20%	N	N
68	6NYCRR 228-1.8	U-00009 ES 0000P P 00P	VOC content limit: 5 lbs/gal for entire vehicle, limit is 6.2 lbs/gal for touch ups	Facility is in compliance with this condition	N	N
69	6NYCRR 228-1.8	U-00009 ES 0000P P 00P	Coating mixture composition, individual ingredient VOC limitations	Facility is in compliance with this permit condition	N	N
70	6 NYCRR 227-1.3(a)	U-00010	Daily visual opacity to be observed and logged or whenever operational. Method 9 is not mandatory	Facility performs visual opacity logging procedures. Opacity was below 20%.	N	N
72	6 NYCRR 227.2(b)(1)	U-00010 P GEN	Particulate stack testing once during the term of the permit, limit: 0.1 lb/MMBtu	Facility will be performed the required stack test as per the approved protocol	N	N
98	6 NYCRR 227-2.6(c)(3)	U-00010	Once during the term of the permit, NOx emissions test must be performed	NOx emissions test was performed, stack test report was approved by DEC as well as a variance was issued.	N	N
73	6 NYCRR 201-6	U-00011	Perform stack based on approved protocol with and without duct firing. Nox emissions rates to be established.	Test was completed in April 2015, report was submitted in July 2015	N	N
74	6 NYCRR 201-6	U-00011	Perform stack based on approved protocol with and without duct firing. PM-10 emissions rates to be established to be used	Test was completed in April 2015, report was submitted in July 2015	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
			for capping conditions/calculations			
75	6 NYCRR 201-6	U-00011	Within 180 days after commencement of the cogeneration plant, facility shall conduct PM-2.5 test	Test was completed in April 2015, report was submitted in July 2015. The emissions were found to be under 0.0014 lbs/MMBtu and the corresponding incremental emissions are under 10 tons per year	N	N
76	6NYCRR 201-7	U-00011	Upon commencement of operation of the plant, on a monthly basis NOx must be calculated. 12-month NOx rolling must be under 42 tpy	NOx is under 42 tpy	N	N
77	6NYCRR 201-7	U-00011	Upon commencement of operation of the plant, on a monthly basis PM-10 must be calculated. 12-month NOx rolling must be under 15.77 tpy	PM10 is under 15.77 tpy	N	N
78	6 NYCRR 227-1.3(a)	U-00011	Observe opacity and maintain records	Facility will observe opacity and maintain records. If there are reasons to believe opacity in excess of 20%, a certified Method 9 test will be performed for verification	N	N
79	6 NYCRR 231-6.2	U-00011	Commencement of construction of cogen plant and black start engine generator will be only on or after 7/18/2012. The contemporaneous period for previously permitted PLM generators ends on 7/17/2012.	Facility constructed after the set date	N	N
80	40 CFR 60.4340(a), NSPS Subpart KKKK	U-00011	Annual stack test for NOx must be performed. If the performance test result is less than 75% of NOx limit for turbine, the facility may reduce the frequency of subsequent performance to once every 2 years.	The April 2015 test indicates lower than 75% of the limit (25 ppm vs. 13 ppm) and therefore, the facility will perform the next test before June 2017	N	N
81	40 CFR 60.4365(a), NSPS Subpart	U-00011	Maximum sulfur content of fuel oil is 0.05% by weight (500 ppmw)	Facility uses gas and oil with sulfur content less than allowed limits	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
	KKKK		Maximum sulfur content of natural gas is 20 grains/100 SCF			
83	40 CFR 60.4375(b), NSPS Subpart KKKK	U-00011	Recordkeeping and maintenance	Facility will submit test reports within 60 days and maintain copies on site.	N	N
85	40 CFR 60.4415, NSPS Subpart KKKK	U-00011 P007	Initial performance test must be conducted for SO_2 as per §60.8. subsequent SO_2 must be conducted every 14 months.	Facility's gas supplier provided sulfur content reports	N	N
88	40CFR 60.4205(b), Subpart IIII	U-00011 P008 S00033	2007 and later CI RICE must comply with Subpart IIII requirements by obtaining certification from EPA (by manufacturer)	EPA certified engine has been installed	N	N
89	40CFR 60.4207(b), Subpart IIII	U-00011 P008 S00033	Diesel fuel for this unit must not contain aromatic content in excess of 35%	Facility obtains fuel analysis report from the supplier to ensure aromatic content	N	N
90	40CFR 60.4207(b), Subpart IIII	U-00011 P008 S00033	The cetane index ratio of the diesel fuel oil for this source should be at least 40 per gallon. It must be verified by fuel oil supplier's fuel oil analysis report	Facility obtains fuel analysis report from the supplier to ensure a minimum cetane index ratio of 40	N	N
91	40CFR 60.4207(b), Subpart IIII	U-00011 P008 S00033	Sulfur content of the diesel fuel oil for this source should not exceed 15 ppm. It must be verified by a fuel oil sulfur analysis per delivery	Facility obtains fuel analysis report from the supplier to ensure sulfur content is 15ppm or less	N	N
92	40CFR 60.4209(a), Subpart IIII	U-00011 P008 S00033	A non-resettable hour meter must installed	The engine is fixed with a non-resettable hour meter	N	N
93	40CFR 60.4211(e), Subpart IIII	U-00011 P008 S00033	The maintenance check operating hours for the engine is limited to 100 hrs per year	Facility will restrict the maintenance operating hours to a maximum of 100 hrs/year	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
98	6 NYCRR 227-2.4(f)(3)	U-00011 P008 S00033	The operation of emergency engine must be limited to 500 hours per year on a 12-month rolling basis	Facility will limit the use of emergency generators to 500 hrs on a 12-month rolling basis	N	N
99	6 NYCRR 227-2.5(b)	Facility	Condition is effective till July 1, 2014 for system-wide NOx averaging plan	Facility is in compliance with this condition	N	N
100	6 NYCRR 227-2.5(c)	U-00001 U-00002 U-00003	Annual tune up of 8 boilers must be performed	Facility perform annual tune up of the boilers	N	N
101	6 NYCRR 227-2.5(c)	U-00001 U-00002 U-00003	All 8 boilers must meet 0.12 lbs/MMBtu NOx emissions limit on gas and oil	Facility will perform testing within the permit term. A test protocol will be submitted	N	N
102	6 NYCRR 227-2.5(c)	U-00010 ES00010	NOx intermittent emissions testing Limit: 7.7 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
103	6 NYCRR 227-2.5(c)	U-00010 ES00011	NOx intermittent emissions testing Limit: 7.0 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
104	6 NYCRR 227-2.5(c)	U-00010 ES00012	NOx intermittent emissions testing Limit: 7.5 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
105	6 NYCRR 227-2.5(c)	U-00010 ES00013	NOx intermittent emissions testing Limit: 7.4 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
106	6 NYCRR 227-2.5(c)	U-00014 ES00012	NOx intermittent emissions testing Limit: 7.8 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
107	6 NYCRR 227-2.5(c)	U-00010 ES00015	NOx intermittent emissions testing Limit: 8.1 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
108	6 NYCRR 227-2.5(c)	U-00010 ES00016	NOx intermittent emissions testing Limit: 5.9 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
109	6 NYCRR 227-2.5(c)	U-00010 ES00017	NOx intermittent emissions testing Limit: 3.5 gm/bhp-hr	Stack testing will be performed within this permit term	N	N

Condition Number(s)	Applicable Requirement	Permit Level	Description of Requirement	Description of Monitoring Data and Analysis Required by Permit	Deviations? Y/N	Separate Report Date?
110	6 NYCRR 227-2.5(c)	U-00010 ES00018	NOx intermittent emissions testing Limit: 6.9 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
111	6 NYCRR 227-2.5(c)	U-00010 ES00019	NOx intermittent emissions testing Limit: 7.0 gm/bhp-hr	Stack testing will be performed within this permit term	N	N
112	6 NYCRR 227-2.5(c)	U-00010 ES00020	NOx intermittent emissions testing Limit: 6.9 gm/bhp-hr	Compliance with NOx limit was shown during the stack testing in May 2008	N	N
113	6 NYCRR 227-2.5(c)	U-00010 ES00022	NOx intermittent emissions testing Limit: 7.0 gm/bhp-hr	Compliance with NOx limit was shown during the stack testing in May 2008	N	N
114	6 NYCRR 227-2.5(c)	U-00010 ES00024	NOx intermittent emissions testing Limit: 7.7 gm/bhp-hr	Compliance with NOx limit was shown during the stack testing in May 2008	N	N
115	6 NYCRR 227-2.5(c)	U-00010 ES00025	NOx intermittent emissions testing Limit: 6.6 gm/bhp-hr	Compliance with NOx limit was shown during the stack testing in May 2008	N	N
116	6 NYCRR 227-2.5(c)	U-00010 ES00027	NOx intermittent emissions testing Limit: 8.3 gm/bhp-hr	Compliance with NOx limit was shown during the stack testing in May 2008	N	N
117	6NYCRR 227-2.4(f)(6)	U-00011 P008 ES00033	Black start engines use not to exceed 500 hrs per year	Use is under 500 hours per year	N	N

SUMMARY OF DEVIATIONS FROM PERMIT REQUIREMENTS

Condition Number(s)	Applicable Requirement	Permit Level	Description of Deviation	Probable Cause of Deviation	Corrective/Preventative Action Taken as a Result of the Deviation	Date of Written Notification
39	6 NYCRR 231-10.5	U-00001	Compliance Certification	Total NOx/yr emissions for this unit is over 8.0 tpy. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
49	6 NYCRR 231-10.5	U-00002	Compliance Certification	NOx exceeded 2.0 tpy limit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
57	6 NYCRR 231-10.5	U-00003	Compliance Certification	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT
58	6 NYCRR 231-10.5	U-00003	Compliance Certification	NOx emissions is over 1.0 tpy for this unit. This is because the cogen units could not be operated during the winter months. Oil had to be used, thereby exceeding the limits	Moving ahead, the CHP units will be used primarily	This REPORT

The City of New York Department of Correction

№ 14

DATE AND TIME PAINT BOOTH USED	EMPLOYEE OPERATING PAINT BOOTH	VEHICLE TO BE PAINTED	TOTAL GAL PAINT
01/21/15	Jay GARRETT	450T	½ PT GREY
01/22/15	Jay GARRETT	450T	1 PT WHITE
01/29/15	Jay GARRETT	79T	½ PT BLACK
1-30-15		Son 49227	

The City of New York Department of Correction

№ 15

DATE AND TIME PAINT BOOTH USED	EMPLOYEE OPERATING PAINT BOOTH	VEHICLE TO BE PAINTED	TOTAL GAL. PAINT
2/26/15 - 4hrs	Jay GARRETT	363 B	1 Qt GREY
2/27/15 - 6hrs	Jay GARRETT	363 B	2 Qt WHITE
	Son # 49227		
3/03/15 - 4hrs	Jay GARRETT	350B	1 Qt GREY
3/06/15 - 6hrs	Jay GARRETT	350B	2 Qt WHITE
3/18/15 - 4hrs	Jay GARRETT	72BT	1 Qt WHITE
3/30/15 - 1hr.	Jay GARRETT	14M	½ PT GREY
3/30/15 - 2hrs.	Jay GARRETT	14M	1 PT WHITE
	Son #49227		
4/14/15 - 1hr.	Jay GARRETT	331B	½ PT BLACK
4/15/15 - 1hr.	Jay GARRETT	14M	½ PT GREY
4/15/15 - 2hrs.	Jay GARRETT	14M	1 PT WHITE
4-30-15		Son 49227	
5/06/15 - 2hrs.	Jay GARRETT	WC12	1 PT GREY
5/07/15 - 4hrs.	Jay GARRETT	WC12	1 Qt WHITE
4-22-15		Son 49227	
6/18/15 - 2hrs.	Jay GARRETT	353B	1 PT BLACK
6/24/15 - 2hrs.	Jay GARRETT	357B	1 PT BLACK
6-30-15		Son 49227	
7/24/15 - 2hrs	Jay GARRETT	850B	1 PT GREY
7/24/15 - 4hrs.	Jay GARRETT	850B	1 Qt WHITE
7/31/15 - 2hrs	Jay GARRETT	226T	1 PT GREY.
7/31/15 - 4hrs	Jay GARRETT	226T	1 Qt WHITE.
7-31-15		Son 49227	
8/18/15 - 2hrs.	Jay GARRETT	840B	1 PT BLACK
8-31-15		Son 49227	
9/03/15 - 2hrs.	Jay GARRETT	371B	1 PT GREY.
9/08/15 - 2hrs.	Jay GARRETT	371B	1 PT WHITE
9/09/15 - 2hrs	Jay GARRETT	46UT	1 PT GREY
9/09/15 - 4hrs	Jay GARRETT	46UT	1 Qt WHITE
9/21/15 - 2hrs.	Jay GARRETT	843B	1 PT BLACK.
9/25/15 - 2hrs.	Jay GARRETT	360B	1 PT BLACK
9-30-15		Son. 49227	
10/05/15 - 2hrs.	Jay GARRETT	835B	1 PT BLACK.
10/09/15 - 2hrs	Jay GARRETT	240B	1 PT BLACK.

EMS ENVIRONMENTAL MONITOR SERVICE

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Remit to only:
P.O. Box 4340 • Yalesville, CT 06492

website:
www.emsct.com

SERVICE ORDER NO. 3582

DATE 9/5/2014

ASSIGNED TO M Kominek

☐ FIELD WORK
☑ SHOP WORK

BILLING ADDRESS
Rikers Island

SERVICE
Curtis Pierre
New York City Dept. of Correction
17-25 Mazen St.
East Elmhurst, NY 11370

CUSTOMER REQUESTING SERVICE: Curtis Pierre

CUSTOMER PO#: KCM99-6155

CREDIT CARD INFORMATION:

SERVICE REQUESTED:
Zero Arm Malfunctioning per BaeT.

EQUIPMENT DETAILS

MODEL NO. 1304

SERIAL NO. 279

BILLING DETAILS
☐ STANDARD SERVICE
☑ EMERGENCY SERVICE
☐ WARRANTY SERVICE
☐ SERVICE CONTRACT
☐ GOLD CONTRACT
☐ OTHER (EXPLAIN)

SERVICE PERFORMED
SET UNIT UP ON OPTICAL TEST BENCH TO CUSTOMER SPECS. REPLACED C/ZERO BUMPER. C/ZERO ASSEMBLY CLEANED LENSES. SET ALL VOLTAGES TO FACTORY SPECS. CALIBRATED W/ N.D.F'S. PERFORMED OFF STACK ZERO CALIBRATION. RAN ON RECORDER FOR AT LEAST 24HRS. UNIT IS WORKING TO FACTORY SPECS.
C/Z = 20%
C/S = 25.6%

SUMMARY OF MATERIALS USED

QTY	PART NO.	DESCRIPTION	UNIT PRICE	TOTAL COST
1	2999	EMERGENCY SERVICE	637.50	637.50
1	2372	C/ZERO ASSEMBLY	738.00	738.00
1	2389	ZERO BUMPER	N.C.	N.C.
1	OFF STACK	ZERO (DISCOUNT)	600.00	600.00

WORK PERFORMED BY M Kominek DATE 9-5-14

WORK COMPLETED SATISFACTORILY
CUSTOMER SIGNATURE DATE

APPROVED BY EMS MANAGER	DATE	INV #

TOTAL LABOR
TOTAL MATERIAL
S/H:
TOTAL

Worksmanship performed and materials replaced on this repair are warranted for ninety days after date of delivery. If trouble develops in work performed, replacement of defective parts will be made free of charge. Parts not replaced are not subject to guarantee.

WHITE - ORIGINAL COPY
CANARY - CUSTOMER COPY
GREEN - NUMERICAL CONTROL COPY
MANILA - BILLING/PERMANENT SERVICE DEPT. COPY

Riker's Island Cogen Totals & Performance

Date	GT1 Total Real Power (KWH)	GT2 Total Real Power (KWH)	GT1 + GT2 Total Real Power (KWH)	Total Island Power Demand (KWH)	Total Imported Power (KWH)	Total Generated Power (KWH)	Percent Island Load	GT1 Heat Rate (BTU/kW)	GT2 Heat Rate (BTU/kW)	GT1 Fuel (lb)	GT2 Fuel (lb)
Jan	321,755	0	321,755	973,166	676,496	296,671	30.5%	9,791	0	296,671	0
Feb	1,211,057	62,210	1,273,267	13,555,243	12,479,168	1,076,075	7.9%	9,979	9,757	637,209	32,006
Mar	954,936	676,415	1,631,350	12,340,443	10,893,562	1,446,881	11.7%	9,752	9,399	491,059	335,222
Apr	4,768,050	3,804,306	8,572,356	9,996,138	1,753,808	8,242,330	82.5%	9,731	9,778	2,446,618	1,961,354
May	4,204,156	4,329,899	8,534,054	9,111,103	1,090,614	8,020,489	88.0%	10,382	9,865	2,301,393	2,252,272
Jun	4,323,813	4,149,009	8,472,822	9,312,031	1,390,806	7,921,224	85.1%	10,148	9,954	2,313,652	2,177,654
Jul	4,389,439	4,601,435	8,990,875	10,909,975	2,530,196	8,379,778	76.8%	9,929	9,786	2,298,163	2,374,321
Aug	4,571,409	4,788,501	10,854,539	10,854,539	2,191,453	8,663,086	79.8%	9,989	9,805	2,407,673	2,475,606
Sep	4,777,643	4,546,779	9,324,423	9,749,811	1,032,553	8,717,258	89.4%	10,002	9,998	2,519,715	2,396,904
Oct	0	0	0	0	0	0				0	0
Nov	0	0	0	0	0	0				0	0
Dec	0	0	0	0	0	0				0	0
YTD Total	29,522,258	26,958,554	57,975,442	86,802,450	34,038,657	52,763,793	60.8%	9,967	9,793	15,712,152	14,005,340

Date	GT1 Availability Factor (%)	GT2 Availablity Factor (%)	Facility Availablity Factor (%)	GT1 Capacity Factor	GT2 Capacity Factor	Facility Capacity Factor	GT1 Scheduled Outage Factor (%)	GT2 Scheduled Outage Factor (%)	GT1 Forced Outage Factor (%)	GT2 Forced Outage Factor (%)	
Jan				89.4%	0.0%	44.7%					
Feb	26.3%	1.5%	13.9%	24.0%	1.2%	12.6%	6.3%	22.2%	67.4%	67.4%	
Mar	19.9%	13.2%	16.6%	17.7%	12.6%	15.1%	6.7%	0.8%	73.4%	86.8%	
Apr	94.4%	80.0%	87.2%	88.3%	70.5%	79.4%	5.6%	3.1%	0.0%	16.9%	
May	93.7%	89.5%	91.6%	75.3%	77.6%	76.5%	1.7%	0.0%	4.6%	10.5%	
Jun	94.3%	91.0%	92.6%	80.1%	76.8%	78.5%	5.6%	7.6%	0.0%	1.1%	
Jul	88.7%	93.8%	91.3%	78.7%	82.5%	80.6%	0.9%	1.1%	10.3%	5.1%	
Aug	92.5%	97.4%	95.0%	81.9%	85.8%	83.9%	7.3%	2.6%	0.2%	0.0%	
Sep	100.0%	100.0%	100.0%	88.5%	84.2%	86.3%	0.0%	0.0%	0.0%	0.0%	
Oct											
Nov											
Dec											
YTD Total	76.9%	71.7%	74.3%	67.5%	61.7%	64.6%	4.2%	4.5%	18.9%	22.9%	

Date	HRSG 1 Fuel Flow (MCU/FT)	HRSG 2 Fuel Flow (MCU/FT)	HRSG 1 Steam Flow (K/lb)	HRSG 2 Steam Flow (K/lb)	Combined Steam Flow (K/lb)	HRSG 1 Feedwater Flow (K/lb)	HRSG 2 Feedwater Flow (K/lb)	Combined Feedwater Flow (K/lb)			
Jan											
Feb											
Mar	162	590	4,202	5,393	9,596	143	198	341			
Apr	4,526	2,608	21,089	22,277	43,366	26,421	22,110	48,532			
May	2,119	1,983	25,995	24,113	50,108	24,625	24,765	49,389			
Jun	430	266	22,345	20,375	42,720	22,974	21,680	44,654			
Jul	56	36	21,951	22,118	44,069	22,415	23,374	45,789			
Aug	0	0	24,733	24,585	49,317	23,165	24,302	47,467			
Sep	0	0	25,433	23,676	49,109	24,076	23,518	47,595			
Oct	0	0	0	0	0	0	0	0			
Nov	0	0	0	0	0	0	0	0			
Dec	0	0	0	0	0	0	0	0			
YTD Total	7,294	5,483	145,749	142,538	288,287	143,819	139,947	283,766			

	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
GRVC									
D/G #1	0 GAL	0 GAL	100 GAL	0 GAL	0 GAL	0 GAL	150 GAL	0 GAL	0 GAL
D/G # 2	0 GAL	0 GAL	100 GAL	0 GAL	0 GAL	0 GAL	150 GAL	0 GAL	0 GAL
D/G #3	25 GAL	25 GAL	40 GAL	0 GAL	0 GAL	0 GAL	100 GAL	0 GAL	125 GAL
D/G #4	25 GAL	25 GAL	40 GAL	0 GAL	0 GAL	0 GAL	100 GAL	0 GAL	125 GAL
TOTAL	**50**	**50**	**280**	**0**	**0**	**0**	**450**	**0**	**250**
RMSC									
D/G #1	0 GAL	0 GAL	0 GAL	20 GAL	20 GAL	20 GAL	50 GAL	50 GAL	20 GAL
D/G #2	0 GAL	0 GAL	0 GAL	20 GAL	20 GAL	20 GAL	50 GAL	50 GAL	20 GAL
TOTAL	**0**	**0**	**0**	**40**	**40**	**40**	**100**	**100**	**40**
WEST FACILITY									
D/G #128	0 GAL	0 GAL	170 GAL	0 GAL	0 GAL	40 GAL	0 GAL	40 GAL	0 GAL
D/G #132	0 GAL	50 GAL	50 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	400 GAL
D/G #136	0 GAL	0 GAL	150 GAL	30 GAL	0 GAL	0 GAL	100 GAL	70 GAL	0 GAL
D/G #140	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	100 GAL	0 GAL	0 GAL
D/G #144	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	40 GAL	0 GAL	40 GAL	0 GAL
TOTAL	**0**	**50**	**370**	**30**	**0**	**80**	**200**	**150**	**400**
OBCC									
MAIN BLD	0 GAL	10 GAL	100 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL
ANNEX	0 GAL	10 GAL	50 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL
CPSU # 1	10 GAL	10 GAL	50 GAL	0 GAL	20 GAL	20 GAL	100 GAL	40 GAL	10 GAL
CPSU # 2	0 GAL	10 GAL	50 GAL	0 GAL	20 GAL	20 GAL	530 GAL	45 GAL	20 GAL
TOTAL	**10**	**40**	**250**	**0**	**40**	**40**	**630**	**85**	**30**

AVOGADRO Environmental Corporation

Clean Air and Water, for Today and Tomorrow

Ms. Jennifer M. Franco
AKRF, INC.
34 South Broadway, Suite 401
White Plains, New York 10601

July 31, 2015

Subject: **Vendor Guarantee Summary Letter; CT 1 and CT 2;**
Riker's Island Cogeneration Facility; New York City, NY;
Facility DEC ID: 2-6007-00259;
Avogadro Environmental Corporation Project No.: ABE-15-0019A

Dear Ms. Franco:

Enclosed please find one copy of the vendor guarantee summary letter for the above-referenced facility and sources. The letter documents the results of the testing performed by Avogadro Environmental at the Riker's Island Cogeneration Facility on April 14-16 and 20-22, 2015.

This letter summarizes the emission test results for comparison with the Solar emission guarantees and emission estimates. The ASTM method to determine the sulfur content of the natural gas was used to calculate the SO2 emission rates from the stack test. The SO2 results obtained from the USEPA reference test Method 6C could not be used to determine the SO2 emission rates due to the dilute SO2 concentrations in the stack exhaust gases. The natural gas sample laboratory data and emission calculations are included as attachments. All other supportive information can be found in the compliance emissions test report and appendices.

This summary letter has not been submitted to any regulatory agencies.

The emission test results with the vendor guarantees are summarized in the tables below. The Solar emission guarantees for NOx and CO are met. SO2 slightly exceeded the vendor estimate without duct firing. All other Solar emission estimated values including VOC and PM are also met.

TABLE 1: SUMMARY OF NOX, CO, AND VOC EMISSIONS- CT 1 (WITH DB)

Run	1	2	3	Average	Vendor Guarantees
Date	4/16/2015	4/16/2015	4/16/2015	---	---
Time	07:45-08:45	09:25-10:25	11:30-12:30	---	---
Stack Flow (DSCFM)	48903	48130	46094	47709	---
Nitrogen Oxides [NOx as NO_2]					
ppmv, dry	17.12	17.46	17.29	17.29	---
ppmv, dry @ 15% O_2	12.81	13.10	13.00	12.97	14.12[1]
pounds/hour	6.00	6.02	5.71	5.91	6.4
lb/MMBtu	0.047	0.048	0.048	0.048	---
lb/MW-hr	0.768	0.777	0.749	0.764	---
Carbon Monoxide [CO]					
ppmv, dry	9.86	9.45	9.52	9.61	---
ppmv, dry @ 15% O_2	7.38	7.09	7.16	7.21	28.44
pounds/hour	2.10	1.98	1.91	2.00	7.8[1]
lb/MMBtu	0.017	0.016	0.016	0.016	---
Total Non – Methane Hydrocarbons (as Methane) [VOC] by difference					
ppmv, dry	<1.0	<1.0	<1.0	<1.0	---
ppmv, dry @ 15% O_2	<0.75	<0.75	<0.75	<0.75	---
pounds/hour	<0.12	<0.12	<0.12	<0.12	0.5[1]
lb/MMBtu	<0.001	<0.001	<0.001	<0.001	---

[1]Estimated value

dscfm = dry standard cubic feet per minute
ppmv, dry = parts per million by volume, dry basis
ppmv, dry @ 15% O_2 = parts per million by volume, dry basis, corrected to 15% oxygen
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units
lb/MW-hr = pounds per megawatt hour

AKRF @ Riker's Island
Avogadro Project No.: ABE-15-0019A
July 31, 2015

TABLE 2: SUMMARY OF NOX, CO, AND VOC EMISSIONS- CT 1 (NO DB)

Run	1	2	3	Average	Vendor Guarantees
Date	4/14/2015	4/14/2015	4/14/2015	---	---
Time	08:05-09:05	9:50-10:50	12:10-13:10	---	---
Stack Flow (DSCFM)	47630	47063	47880	47524	---
Nitrogen Oxides [NOx as NO_2]					
ppmv, dry	10.03	10.26	10.32	10.21	---
ppmv, dry @ 15% O_2	10.10	10.34	10.44	10.30	12
pounds/hour	3.54	3.54	3.57	3.55	3.7[1]
lb/MMBtu	0.037	0.038	0.038	0.038	0.043[1]
lb/MW-hr	0.461	0.460	0.469	0.464	---
Carbon Monoxide [CO]					
ppmv, dry	1.64	1.81	1.92	1.79	---
ppmv, dry @ 15% O_2	1.65	1.82	1.94	1.80	25
pounds/hour	0.35	0.38	0.40	0.38	4.7[1]
lb/MMBtu	0.004	0.004	0.004	0.004	---
Total Non – Methane Hydrocarbons (as Methane) [VOC] by difference					
ppmv, dry	<1.06	<1.07	<1.07	<1.07	---
ppmv, dry @ 15% O_2	<1.07	<1.08	<1.09	<1.08	2.5[1]
pounds/hour	<0.13	<0.13	<0.13	<0.13	0.3[1]
lb/MMBtu	<0.001	<0.001	<0.001	<0.001	---

[1]Estimated value

dscfm = dry standard cubic feet per minute
ppmv, dry = parts per million by volume, dry basis
ppmv, dry @ 15% O_2 = parts per million by volume, dry basis, corrected to 15% oxygen
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units
lb/MW-hr = pounds per megawatt hour

TABLE 3: SUMMARY OF NOX, CO, AND VOC EMISSIONS- CT 2 (WITH DB)

Run	1	2	3	Average	Vendor Guarantees
Date	4/22/2015	4/22/2015	4/22/2015	---	---
Time	08:10-09:10	09:45-10:45	11:45-12:45	---	---
Stack Flow (DSCFM)	46087	46713	45372	46057	---
Nitrogen Oxides [NOx as NO_2]					
ppmv, dry	16.84	16.79	16.81	16.81	---
ppmv, dry @ 15% O_2	12.23	12.22	12.23	12.22	14.12[1]
pounds/hour	5.56	5.62	5.46	5.55	6.4
lb/MMBtu	0.045	0.045	0.045	0.045	---
lb/MW-hr	0.746	0.767	0.754	0.756	---
Carbon Monoxide [CO]					
ppmv, dry	11.83	11.36	11.20	11.46	---
ppmv, dry @ 15% O_2	8.59	8.27	8.15	8.33	28.44
pounds/hour	2.38	2.31	2.22	2.30	7.8[1]
lb/MMBtu	0.019	0.019	0.018	0.019	---
Total Non – Methane Hydrocarbons (as Methane) [VOC] by difference					
ppmv, dry	<1.0	<1.0	<1.0	<1.0	---
ppmv, dry @ 15% O_2	<0.73	<0.73	<0.73	<0.73	---
pounds/hour	<0.12	<0.12	<0.11	<0.12	0.5[1]
lb/MMBtu	<0.0009	<0.0009	<0.0009	<0.0009	---

[1]Estimated value

dscfm = dry standard cubic feet per minute
ppmv, dry = parts per million by volume, dry basis
ppmv, dry @ 15% O_2 = parts per million by volume, dry basis, corrected to 15% oxygen
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units
lb/MW-hr = pounds per megawatt hour

AKRF @ Riker's Island
Avogadro Project No.: ABE-15-0019A
July 31, 2015

TABLE 4: SUMMARY OF NOX, CO, AND VOC EMISSIONS- CT 2 (NO DB)

Run	1	2	3	Average	Vendor Guarantees
Date	4/20/2015	4/20/2015	4/20/2015	---	---
Time	07:50-08:50	09:30-10:30	11:45-12:45	---	---
Stack Flow (DSCFM)	47268	46349	47081	46899	---
Nitrogen Oxides [NOx as NO_2]					
ppmv, dry	8.32	8.46	8.15	8.31	---
ppmv, dry @ 15% O_2	8.44	8.58	8.25	8.42	12
pounds/hour	2.82	2.81	2.75	2.79	3.7[1]
lb/MMBtu	0.031	0.032	0.030	0.031	0.043[1]
lb/MW-hr	0.367	0.363	0.367	0.366	---
Carbon Monoxide [CO]					
ppmv, dry	1.59	1.63	1.60	1.61	---
ppmv, dry @ 15% O_2	1.62	1.66	1.62	1.63	25
pounds/hour	0.33	0.33	0.33	0.33	4.7[1]
lb/MMBtu	0.004	0.004	0.004	0.004	---
Total Non – Methane Hydrocarbons (as Methane) [VOC] by difference					
ppmv, dry	<1.1	<1.1	<1.1	<1.1	---
ppmv, dry @ 15% O_2	<1.09	<1.10	<1.09	<1.09	2.5[1]
pounds/hour	<0.13	<0.13	<0.13	<0.13	0.3[1]
lb/MMBtu	<0.001	<0.001	<0.001	<0.001	---

[1]Estimated value

dscfm = dry standard cubic feet per minute
ppmv, dry = parts per million by volume, dry basis
ppmv, dry @ 15% O_2 = parts per million by volume, dry basis, corrected to 15% oxygen
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units
lb/MW-hr = pounds per megawatt hour

TABLE 5: SUMMARY OF SO2 EMISSIONS FROM NATURAL GAS SAMPLE

Date of NG Sample	4/20/2015	Vendor Estimates
SO_2 via Natural Gas Sample[1]		
ppmv	1.37	---
pounds/hour	0.02	0.03 (with DB)
lb/MMBtu	0.00022	0.0002 (no DB)

[1]Sulfur Dioxide emissions were calculated by using ASTM D5504, based on the sulfur in the natural gas. This method was used for vendor estimate purposes. The SO_2 results apply to both turbines since they share the same natural gas source.

ppmv = parts per million by volume
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units

TABLE 6: SUMMARY OF TOTAL PARTICULATE EMISSIONS- CT 1 (WITH DB)

Run	1	2	3	Average	Vendor Guarantee
Date	4/15/2015	4/16/2015	4/16/2015	---	---
Time	11:55-15:02	07:45-10:55	11:30-14:37	---	---
Front Half PM					
grains/dscf	<0.00004	<0.00010	<0.00003	<0.00006	---
pounds/hour	<0.0159	<0.0412	<0.0104	<0.0225	---
lb/MMBtu	<0.0001	<0.0003	<0.0001	<0.0002	---
Total Condensable PM					
grains/dscf	0.0002	0.0002	0.0002	0.0002	---
pounds/hour	0.0955	0.0720	0.0778	0.0818	---
lb/MMBtu	0.0008	0.0006	0.0007	0.0007	---
Total PM (Front and Back Half)					
grains/dscf	<0.0003	<0.0003	<0.0002	<0.0003	---
pounds/hour	<0.111	<0.113	<0.088	<0.104	---
lb/MMBtu	<0.0009	<0.0009	<0.0007	<0.0009	0.016

grains/dscf = grains per dry standard cubic feet
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units

TABLE 7: SUMMARY OF TOTAL PARTICULATE EMISSIONS- CT 1 (NO DB)

Run	1	2	3	Average	Vendor Guarantee
Date	4/14/2015	4/14/2015	4/15/2015	---	---
Time	08:05-11:20	12:10-15:20	07:15-10:22	---	---
Front Half PM					
grains/dscf	<0.0001	<0.0000	<0.0001	<0.0001	---
pounds/hour	<0.0217	<0.0104	<0.0361	<0.0228	---
lb/MMBtu	<0.0002	<0.0001	<0.0004	<0.0002	---
Total Condensable PM					
grains/dscf	0.0003	0.0004	0.0002	0.0003	---
pounds/hour	0.1248	0.1773	0.0877	0.1299	---
lb/MMBtu	0.0014	0.0020	0.0010	0.0014	---
Total PM (Front and Back Half)					
grains/dscf	<0.0004	<0.0005	<0.0003	<0.0004	---
pounds/hour	<0.146	<0.188	<0.124	<0.153	---
lb/MMBtu	<0.0016	<0.0021	<0.0014	<0.0017	0.019

grains/dscf = grains per dry standard cubic feet
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units

TABLE 8: SUMMARY OF TOTAL PARTICULATE EMISSIONS- CT 2 (WITH DB)

Run	1	2	3	Average	Vendor Guarantee
Date	4/21/2015	4/22/2015	4/22/2015	---	---
Time	11:15-14:20	8:10-11:15	11:45-14:50	---	---
Front Half PM					
grains/dscf	<0.00003	<0.00007	<0.00004	<0.00004	---
pounds/hour	<0.0105	<0.0260	<0.0156	<0.0174	---
lb/MMBtu	<0.0001	<0.0002	<0.0001	<0.0001	---
Total Condensable PM					
grains/dscf	0.0002	0.0002	0.0001	0.0001	---
pounds/hour	0.0577	0.0934	0.0208	0.0573	---
lb/MMBtu	0.0005	0.0008	0.0002	0.0005	---
Total PM (Front and Back Half)					
grains/dscf	<0.0002	<0.0003	<0.0001	<0.0002	---
pounds/hour	<0.0682	<0.1194	<0.0364	<0.0747	---
lb/MMBtu	<0.0006	<0.0010	<0.0003	<0.0006	0.016

grains/dscf = grains per dry standard cubic feet
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units

TABLE 9: SUMMARY OF TOTAL PARTICULATE EMISSIONS- CT 2 (NO DB)

Run	1	2	3	Average	Vendor Guarantee
Date	4/20/2015	4/20/2015	4/21/2015	---	---
Time	07:50-11:00	11:45-14:55	07:15-10:22	---	---
Front Half PM					
grains/dscf	<0.00004	<0.00003	<0.00005	<0.00004	---
pounds/hour	<0.0152	<0.0103	<0.0206	<0.0154	---
lb/MMBtu	<0.0002	<0.0001	<0.0002	<0.0002	---
Total Condensable PM					
grains/dscf	0.0002	0.0002	0.0002	0.0002	---
pounds/hour	0.0759	0.0618	0.0826	0.0735	---
lb/MMBtu	0.0008	0.0007	0.0009	0.0008	---
Total PM (Front and Back Half)					
grains/dscf	<0.0002	<0.0002	<0.0003	<0.0002	---
pounds/hour	<0.0911	<0.0722	<0.1032	<0.0888	---
lb/MMBtu	<0.0010	<0.0008	<0.0012	<0.0010	0.019

grains/dscf = grains per dry standard cubic feet
pounds/hour = pounds per hour
lb/MMBtu = pounds per million British Thermal units

If you have any questions, please call me at extension 102 or Brad Mallow at extension 108.

Sincerely,

Mary Trinzi

Mary B. Trinzi
QA/QC Scientist

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cc: Mr. James Buchok / AECOM

New York State Department of Environmental Conservation
Facility DEC ID : 2600700259

NOTICE OF INSPECTION RESULTS

Date : 07/02/2015

Owner : NYC DEPT OF CORRECTION
75-20 ASTORIA BLVD
EAST ELMHURST, NY 11370-3001

Facility : NYC-DOC - RIKERS ISLAND
17-25 HAZEN ST
EAST ELMHURST ,NY 11370

Contact : CURTIS PIERRE
NYC-DOC SUPPORT SERVICES DIVISION
17-25 HAZEN ST
EAST ELMHURST, NY 11370
(718) 546-1488

Compliance Status Determined On : 04/22/2015 2:50 PM

Compliance Status Determined By : ROBERT G BOLT
1 HUNTERS POINT PLAZA
4740 21 STREET
LONG ISLAND CITY, NY 11101-5407

Basis for Determination : Stack Test - Not Witnessed

Inspection for :

Issued Permits	Type	Effective
2-6007-00259/00033	Air Title V Facility	01/03/2013 - 01/02/2018

Comments :

Review of stack test report dated June 15, 2015 for tests performed on combustion turbines CT1 and CT2 on 4/14-16/2015 and 4/20-22/2015.

Inspection Details :

This Facility has been inspected for the following requirements, issued permits and active consent orders. Detailed descriptions of Emission Units, Emission Points, Processes and Emission Sources can be found in the listed permits.

Permit Determinations (No Violations observed at the time of this Inspection) :

Permit ID : 2-6007-00259/00033 **Renewal :** 2 **Type :** Air Title V Facility

Regulation : 6 NYCRR Subpart 201-6
EU: U-00011

Regulation : 40 CFR 60.4320 (a)
EU: U-00011 **Process:** 007 **ES:** 00029

EU: U-00011 **Process:** 007 **ES:** 00030

Regulation : 40 CFR 60.4415
EU: U-00011 **Process:** 007

Operational Status Data :

FACILITY LEVEL Operational